The Relationship between Socioeconomic Status and Use of Interventions in Families of Children with Autism Spectrum Disorder: Results from the Feasibility and Main Study Phases of ABC-CT

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Introduction

- Prior research indicates significantly reduced utilization of autism-related services in families with lower socioeconomic status (SES) (Liptak et al., 2008)
  - Higher levels of parental education are associated with use of a greater number of services (Patten et al., 2012)
  - Parents with higher SES are more likely to enroll their children with autism spectrum disorder (ASD) in evidence-based practices (EBP) (Irvin et al., 2012)

- This project will investigate the relations between SES and use of interventions from data collected from the ABC-CT project, a multi-site study conducted at five sites across the United States, that aims to measure biomarkers associated with ASD
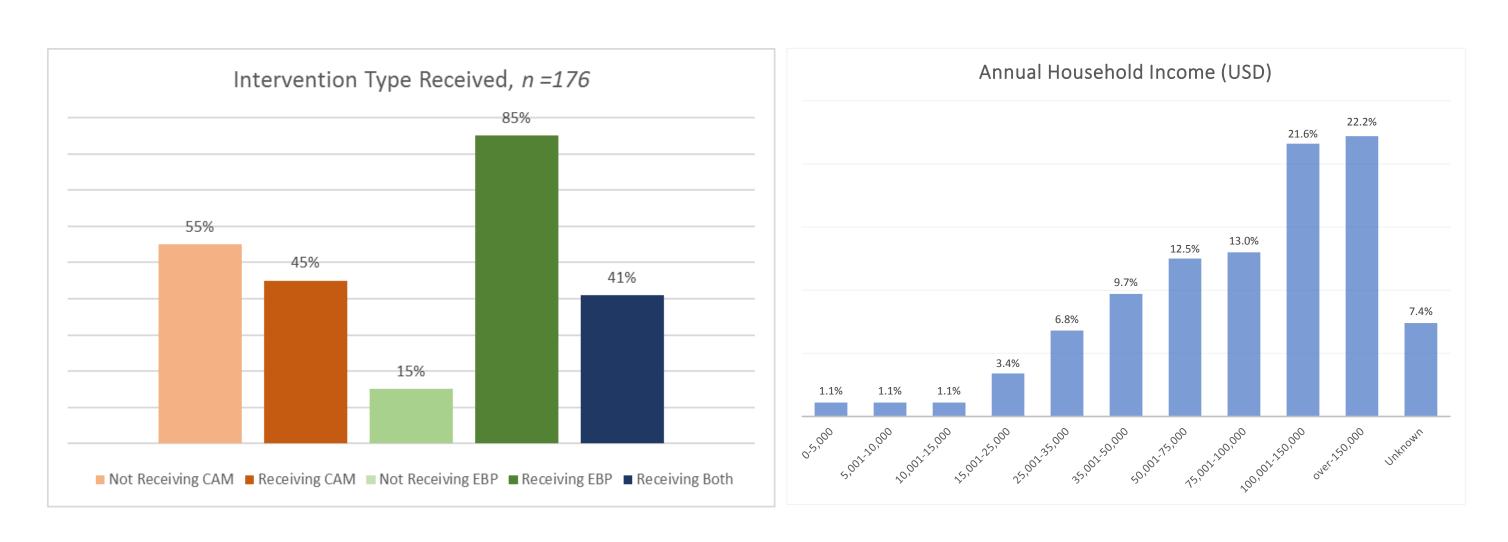
Objective

- Examine the relations between SES, total number of hours of services received, total hours of evidence-based practices (EBP) received, and total hours of complementary and alternative medicine (CAM) received

- Explore the relations between SES and types of intervention used by families of children with ASD (EBP or CAM)
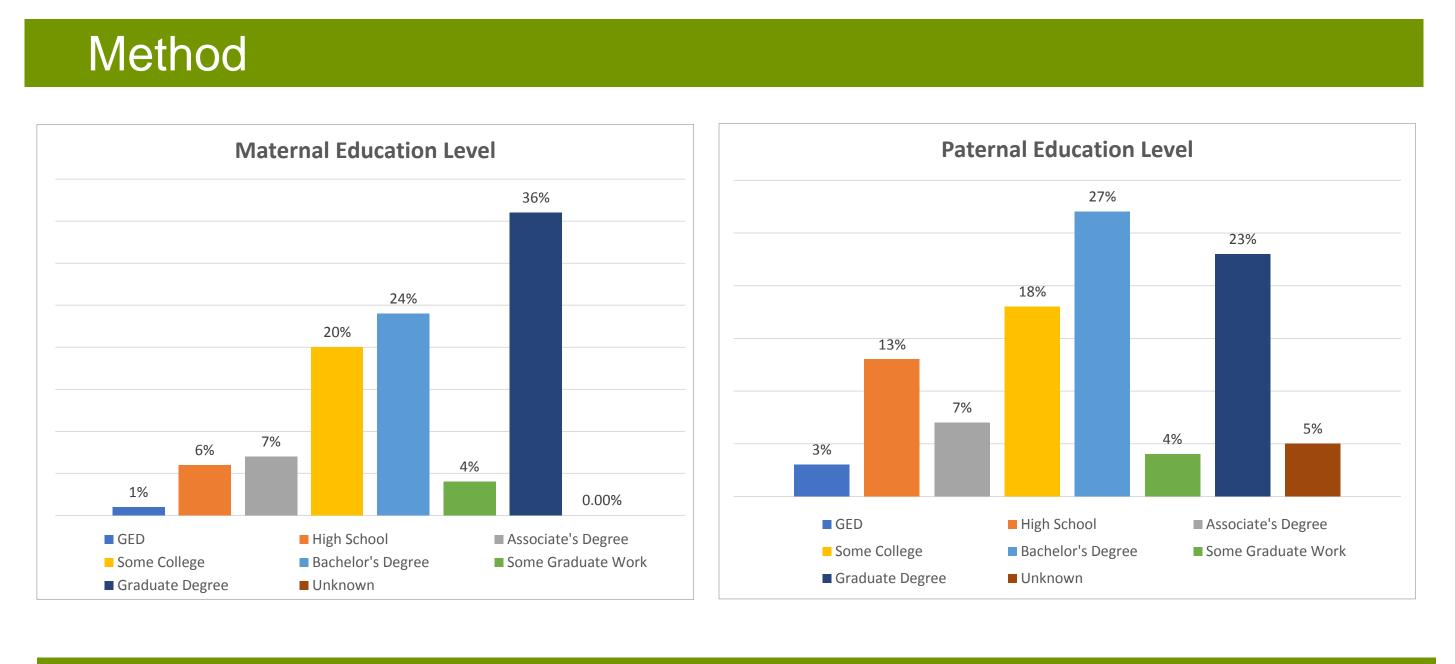
Method

Participants: 176 children (*143 males*) between 4-11 years old (*M= 8 years, 6 months, SD = 1.7. Mean IQ = 95.8, SD = 18.8*) participated in the feasibility or main phase of ABC-CT (to date). All participants met criteria for ASD, based on the Autism Diagnostic Observation Scheduled 2 (ADOS-2), Autism Diagnostic Interview-Revised (ADI-R), and Diagnostic and Statistical Manual-5 (DSM-5).

Procedure:
- Socioeconomic variables (i.e. parental education level and annual household income) were collected from a demographics form completed by parents and/or caregivers
- Intervention history was collected via parent-clinician interview or questionnaire format; information regarding types of intervention received (e.g. speech and language therapy, equine therapy) and the total number of hours of intervention received in the previous six weeks was collected
- Services described in the intervention list were categorized as EBP or CAM (Wong et al., 2015, CDC, 2015)
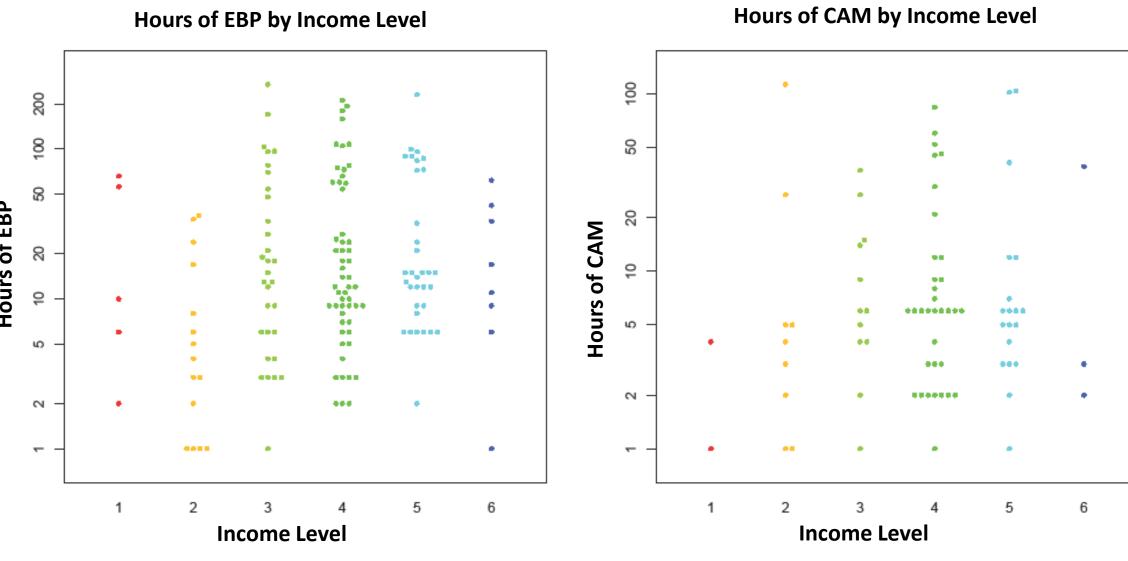

Intervention Type Received, n =176

Annual Household Income (USD)

Method

Maternal Education Level

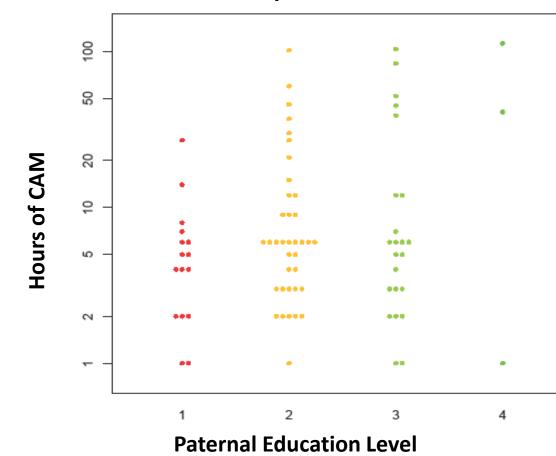Paternal Education Level

Results

Socioeconomic status related to hours of interventions received

- Poisson regressions indicate annual household income is related to hours of EBP received (*p* = 0.01), and hours of CAM received (*p* = 0.001)
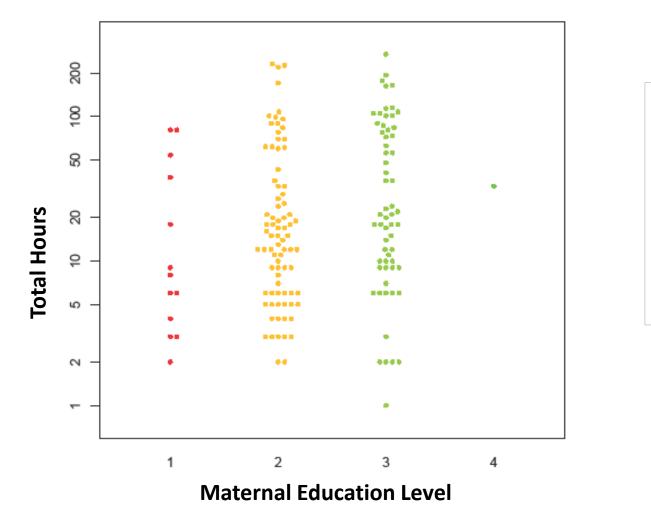

Hours of EBP by Income Level

Hours of CAM by Income Level

Income Levels:
1 = $0 - $15,000
2 = $15,001 - $35,000
3 = $35,001 - $75,000
4 = $75,001 - $150,000
5 = Over $150,000
6 = Unknown

- Paternal education level related to total hours of CAM received (*p* = 0.04)

Hours of CAM by Paternal Education Level

Education Levels:
1 = Less than high school, High School, or GED
2 = Some college, Associate's Degree or B.A.
3 = Some graduate work or graduate degree
4 = Unknown

- Maternal education level was found to be significantly related to total hours of interventions received (*p* = 0.04)

Total Hours of Intervention by Maternal Education Level

Education Levels:
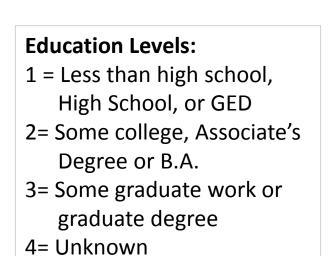1 = Less than high school, High School, or GED
2 = Some college, Associate's Degree or B.A.
3 = Some graduate work or graduate degree
4 = Unknown

Results

Socioeconomic status was not significantly related to the type of intervention received

- Pearson's Chi-squared indicated parental education level and household income were not related to type of intervention received (EBP or CAM)

Discussion

- These findings demonstrate relations between SES and the total number of hours of interventions received, and hours of EBP received, and hours of CAM received

- However, these results do not indicate relations between SES and type of intervention received (EBP or CAM)

- Overall, these findings suggest that SES variables are related to hours of interventions received, but are not related to the type of intervention received by children with ASD

- Future studies should further investigate relations between SES and the amount and type of interventions received, in order to develop a better understanding of how parental education level and household income may impact use of autism-related interventions

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